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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,533		07/14/2001	Myles Jordan	062891.6294	3486
5073	7590	10/03/2005	EXAMINER		INER
BAKER B			SCHUBERT, KEVIN R		
2001 ROSS AVENUE SUITE 600				ART UNIT	PAPER NUMBER
DALLAS,	TX 7520	1-2980	2137	-	
				DATE MAIL ED: 10/03/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Manlication No.	Applicant(e)				
	Application No.	Applicant(s)				
Office Action Summer	09/905,533	JORDAN, MYLES				
Office Action Summary	Examiner	Art Unit				
	Kevin Schubert	2137				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>06 September 2005</u> .						
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This action is non-final.						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-18</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-18</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)  Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB.	(08) 5) Notice of Inform	al Patent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:	·				
U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05) Offic	e Action Summary	Part of Paper No./Mail Date 20050916				

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#### **DETAILED ACTION**

Claims 1-18 have been considered.

### Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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Claims 17-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claims do not relate to matter residing in a tangible embodiment.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtaine

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nachenberg, U.S. Patent No. 6,357,008, in view of Trcka, U.S. Patent No. 6,453,345.

As per claims 1-2,7-12, and 17-18, the applicant describes a method for detecting decryption of encrypted viral code comprising the following limitations which are met by Nachenberg and Trcka:

- a) emulating computer executable code in a subject file (Nachenberg: Col 7, lines 9-12);
- b) maintaining a list of memory regions that have been read and then modified during emulation (Nachenberg: Col 9, lines 5-10);

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c) flagging a memory area that is read during emulation of a first instruction in the computer executable code (Nachenberg: Col 9, lines 5-10);

d) detecting a modification to the flagged memory area during emulation of a second instruction in the computer executable code (Nachenberg: Col 9, lines 5-10);

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- e) updating the list of memory regions to include the modified flagged memory area (Nachenberg: Col 9, lines 11-14);
- f) triggering a viral detection alarm, if one of the listed memory regions is larger than a predetermined size, the viral detection alarm indicating detection of viral code (Nachenberg: Col 8, lines 1-30; Trcka: Col 17, lines 24-34);

Nachenberg discloses all the limitations of the above claim except for part f. With regard to part f, Nachenberg discloses that if a memory region is not larger than a predetermined size it is regarded as non-viral and a first particular course of action is followed (e.g. directly entering the exploration phase). If a memory region is larger than a predetermined size it is regarded as viral and a second course of action is followed. However, Nachenberg does not disclose triggering a viral detection alarm when a memory region is regarded as viral and the second course of action is followed.

Trcka discloses the idea of triggering a viral detection alarm when a virus is detected. The use of a viral detection alarm serves many benefits, including alerting a user so that a user is informed and may take appropriate action. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Trcka with those of Nachenberg and use an alarm because doing so alerts a user so that he is informed of the situation and may take appropriate action.

As per claims 3 and 13, the applicant discloses the method of claims 2 and 12, which are met by Nachenberg in view of Trcka, with the following limitation which is met by Nachenberg:

Wherein the emulation is performed on an instruction-by-instruction basis (Nachenberg: Col 7, lines 55-67).

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As per claims 4,6,14, and 16, the applicant discloses the method of claims 2 and 12, which are met by Nachenberg in view of Trcka, with the following limitation which is met by Nachenberg:

- a) determining whether a selected one of the listed memory regions overlaps the modified memory area (Nachenberg: Figure 4B);
- b) updating the selected memory region to encompass the modified memory area (Nachenberg: Col 9, lines 11-14).

As per claims 5 and 15, the applicant discloses the method of claims 2 and 12, which are met by Nachenberg in view of Trcka, with the following limitation which is anticipated by Nachenberg:

- a) determining whether a selected one of the listed memory regions is contiguous with the modified memory area (Nachenberg: Figure 4B);
- b) updating the selected memory region to encompass the modified memory area (Nachenberg: Col 9, lines 11-14).

Regarding part a, Nachenberg discloses comparing a selected one of the listed memory regions with the modified memory area but does not specifically disclose a determination that the regions are contiguous. The examiner takes official notice that it would have been obvious to one of ordinary skill in the art at the time the invention was filed to also determine whether the memory regions are contiguous.

## Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

### Conclusion

This action is made non-final.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally be reached on M-F 7:30-6:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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EMMANUEL L. MOISE SUPERVISORY PATENT EXAMINER